Certification for Engines for Specially Constructed Vehicles

California Air Resources Board
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Byron Sher Auditorium
Outline

• Background
• Regulatory Process
• Staff’s Proposed Certification Procedures
• Summary and Staff Recommendation
Background: SPCNS Definition

• a vehicle built for private use, not for resale, and not constructed by a licensed manufacturer or remanufacturer.
• may be built from:
  ▫ (1) a kit;
  ▫ (2) new or used, or a combination of parts; or
  ▫ (3) a vehicle reported for dismantling, which, when reconstructed, does not resemble the original vehicle
Background: Kit Cars (SPCNS)

- Hobby-driven market
- Thousands of kit cars currently registered in California
- Integral part of California’s car culture
Background: Certificate of Sequence (SB 100) Process

- 500 new SPCNS per year allowed to be registered in CA
- Exempt from Smog Check
- Every year since its creation in 2001, all 500 certificates have been handed out
Background: Issues Surrounding Kit Cars

- Registration circumvention (Amnesty program)
- Kit Cars are high emitters
- Currently, no ARB mechanism to certify a lower emission solution

1 Uncontrolled SPCNS

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30 Modern Vehicles

*emissions are calculated on a per mile basis
Purpose for Rulemaking

• Allow engine manufacturers to certify clean engines for kit cars
• Create a path to help deal with registration circumvention
• Staff’s Proposal...
  ▫ Cleaner engine choice
  ▫ Ensures proper installation instructions
  ▫ Allows for legal registration of kit cars in years the SB100 certificates of sequence are used up
Regulatory Development Process

• Began in Spring 2011
• 2 Public Workshops – Sacramento (May) and El Monte (July)
  ▫ Engine manufacturers, car hobbyists, engine installers, and SEMA
• Outreach to California engine installers and hobbyist publications
• Other State agencies:
  ▫ Bureau of Automotive Repair (BAR), Department of Motor Vehicles, and California Highway Patrol
Staff’s Proposal: Overview

• Provides a new way for engine manufacturers to certify engines
• Helps ensure engines are installed properly
• Gives hobbyists a low-emitting engine option
Staff’s Proposal: Engine Manufacturer Requirements

- Low-emitting engine package
  - Meet current exhaust and evaporative standards for new vehicles
  - Emissions controls
  - On-board diagnostics (OBD) system
- Emissions test data based on a worst case vehicle
  - Can use data from previously certified vehicle
- Installation instructions
- Label
- Warranty
Staff’s Proposal: 
Engine Installer Requirements

• Installer Definition
  ▫ Installs a certified engine package in a specially constructed vehicle for compensation

• Install per manufacturer instructions
  ▫ Affidavit, reporting and recordkeeping to enable warranty claims and recalls

• Installation Warranty
  ▫ 1 year/12,000 mi warranty
Staff’s Proposal: Hobbyist Requirements

• Install ARB certified engine package per manufacturer’s instructions
• Take to referee station where referee inspects:
  ▫ Ensures vehicle is low-pressure evap test capable
  ▫ Functional Check Engine Light
  ▫ Engine installed per manufacturer’s specifications
• Submits warranty card to manufacturer
15-Day Modifications

- Incorporate forthcoming light-duty vehicle emission standards
  - To be considered by the board in January
- Incorporate BAR Automotive Repair Dealer definitions
- Corrections/clarifying changes
Summary and Staff Recommendation

- Staff’s proposed certification procedures...
  1. Account for the unique nature of SPCNS
  2. Allow manufacturers to certify light-duty engines
  3. Provide hobbyists a low-emitting engine option
- Adopt staff’s proposal with additional recommendations